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PTO/SB/50 (02-01)

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Address to:					Attorney Docket No.				740107-139	a <sub>r</sub>		
12	Commissioner for Patents Box Reissue					First Named Inventor				M Azuma	30	
喜盟						Original Patent Number				6,142,138	5	
Box Reissue Washington, DC 20231						Original Patent Issue Date (Month/Day/Year)				November 7, 2000	1046	
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APPI	LICATION FOI	R REISSI	JE OF:	×	Utility P	Patent		j	Design Po	atent	☐ Plant	Patent
	APPLICAT	ION ELE	MENTS (37	CFR 1.	173)		A	<b>ACC</b>	OMPANY	ING AF	PPLICATION PA	ARTS
2.	(Submit an original, and a duplicate for fee processing) 2.						×	changes 1.173(c)	to the c	atus and support claims. See 37 C	FR	
	patent format	(amended	l, if appropr	iate)	и сору от	•	11.	Ц	Original U.S. Patent for surrender			
5. <b>E</b>	Drawing(s) (proposed amendments, if appropriate)  Reissue Oath/Declaration (original or copy) (37 C.F.R. § 1.175) (PTO/SB/51 or 52)  Power of Attorney							☐ Ribboned Original Patent Grant ☐ Statement of Loss (PTO/SB/55)  12. ☐ Foreign Priority Claim (35 U.S.C. (If applicable)				
	Original U.S. Patent currently assigned? Yes No  If Yes, check applicable box(es))  Written Consent of all Assignees (PTO/SB/53)  37 C.F.R. § 3.73(b) Statement					NO	<ul> <li>13. ■ Information Disclosure □ Copies of Statement (IDS)/PTO-1449 Citations</li> <li>14. □ English Translation of Reissue Oath/Declaration (If applicable)</li> </ul>					
8.	(PTO/SB/96)  CD-ROM or 0			mnuter	· Program	,	15.   Preliminary Amendment					
9. N	(Appendix) or large table  Nucleotide and/or Amino Acid Sequence Submission					1	16. E Return Receipt Postcard (MPEP 503) (Should be specifically itemized)					
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PTO/SB/56 (02-01)

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REISSUE APPLICATION FEE TRANSMITTAL FORM								Docket Number (optional)						
Claims as Filed - Part 1														
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In re Patent of	)
Masayuki AZUMA et al.	:
Patent No.: 6,142,138	:
Issued: November 7, 2000	:
For: HIGH SPEED METHOD OF ALIGNING	:
CUTTING LINES OF A WORKPIECE USING PATTERNS	:

#### STATEMENT OF MANI FISHER

Commissioner for Patents Washington, D.C. 20231

Sir:

I, Mani Fischer, of 7 Taberski Street, Haifa 34762, Israel declare that my name was omitted as an inventor of the above-captioned patent through error without any deceptive intention on my part.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Mani Fischer

M. Fischer

Title

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERC	Œ						
STATEMENT UNDER 37 CFR 3.73(b)	,						
Applicant/Patent Owner: Masayuki AZUMA, Hirofumi SHIMODA, Mani FISCHER	£						
Application No./Patent No.: U.S. Patent 6,142,138 Filed/Issue Date: November 7, 2000	104						
Entitled: HIGH SPEED METHOD OF ALIGNING CUTTING LINES OF A WORKPIECE USING PATTERNS							
Tokyo Semitsu Co., Ltd. , a corporation (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)							
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.) states that it is:							
<ol> <li>the assignee of the entire right, title, and interest; or</li> <li>an assignee of less than the entire right title and interest</li> </ol>							
an assignee of less than the entire right, title and interest.  The extent (by, percentage) of its ownership interest is 50 %							
in the patent application/patent identified above by virtue of either:							
<u> </u>							
A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a continuous thereof is attached.	was opy						
OR							
B. [ ] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:							
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The document was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.							
2. From:							
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3. From:To:							
The document was recorded in the United States Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.							
[ ] Additional documents in the chain of title are listed on a supplemental sheet.							
[V] Copies of assignments or other documents in the chain of title are attached.  [NOTE: A separate copy (i.e., the original assignment document or true copy of the original document) musubmitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in records of the USPTO. See MPEP 302.08]	st be the						
The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.							
January 23, 2002 David S. Şafran, Reg No. 27,997							
Date //pred or printed name							
Signature Attrover I Decord							

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231 DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

In re Patent of	)				
Masayuki AZUMA et al.					
Patent No.: 6,142,138	:				
Issued: November 7, 2000	;				
For: HIGH SPEED METHOD OF ALIGNING CUTTING LINES OF A WORKPIECE	; )				
USING PATTERNS	)				

### **CONSENT OF ASSIGNEE**

Commissioner for Patents Washington, D.C. 20231

Sir:

As owner of an undivided one-half interest in the above-captioned patent, Kulicke & Soffa Investments, Inc. hereby consents to the reissuance of said patent and to the addition of Mani Fischer, of 7 Taberski Street, Haifa 34762, Israel, as an inventor of said patent.

By:

Kulicke & Soffa Investments, Inc.

Name: Jeffrey C. Moore

Title: Secretary

In re REISSUE Patent Application of	)
Masayuki AZUMA et al.	:
Patent No. 6,142,138	: )
Issued: November 7, 2000	:
For: ALIGNMENT METHOD AND APPARATUS	: ) : )

## REQUEST FOR RECORDATION OF ASSIGNMENTS

Box Assignments Commissioner for Patents Washington, D.C. 20231

Sir:

Please find attached two (2) requests for recordation of assignment. Please record first the assignment of U.S. Patent No. 6,142,138 from Tokyo Seimitsu Co., Ltd. to Masayuki AZUMA and Hirofumi SHIMODA executed August 17, 2001. Thereafter, please record the assignment of U.S. Patent No. 6,142,138 from Masayuki AZUMA, Hirofumi SHIMODA, and Mani FISCHER to Tokyo Seimitsu Co., Ltd. and Kulicke & Soffa Investments, Inc. executed August 20, 2001 and August 27, 2001.

Respectfully submitted,

David<sup>l</sup>S. Safran

Registration No. 27,997

NIXON PEABODY LLP 8180 Greensboro Drive, Suite 800 McLean, Virginia 22102 Telephone: (703) 790-9110

In re REISSUE Patent Application of	)
Masayuki AZUMA et al.	) Group Art Unit: 3723
Patent No. 6,142,138	Examiner: T. Eley
Issued: November 7, 2000	)
For: ALIGNMENT METHOD AND APPARATUS	) :
	)

#### Statement Under 37 C.F.R. § 1.173(c)

Commissioner for Patents Washington, D.C. 20231

Sir:

In accordance with the provisions of 37 C.F.R. § 1.173(c), the following statement is provided as to the status of all patent claims and all added claims, and an explanation as to the support in the disclosure for the concurrently made changes to the claims.

All of the patent claims are maintained and new claims 5 & 6 have been added.

Support for new claim 5 can be found in the patent disclosure as follows. Claim 5 is directed to an alignment apparatus (1) for aligning cutting lines of a workpiece which has a workpiece mounting means (cutting table 12) has an X, Y driving mechanism (72) and a rotational driving mechanism (74). Two imaging means (18, 19) are provide at the cutting blade units (see Fig. 3) and produce images of patterns on the workpiece. A storage means is provided which stores reference patterns at low magnification (low magnification memory 82) and at high magnification (high magnification memory 84). Pattern matching is performed by a comparator (90) which compares current images of patterns (from frame memory 86) with the stored reference patterns of low and high magnification and outputs a pattern matching signal which is used by a control means (controller 92) for driving the workpiece mounting means (see Fig. 4 and the description thereof in column 4).

Support for new claim 6 can be found in the patent disclosure as follows. Claim 6 is directed to diving machine that has cutting units (14, 16) with a pair of cutting blades (68, 70) and motors (60, 62) for rotating the cutting blades and an alignment apparatus (1) for aligning

cutting lines of a workpiece. Furthermore, a workpiece mounting means (cutting table 12) has an X,Y driving mechanism (72) and a rotational driving mechanism (74). Two imaging means (18, 19) are provide at the cutting blade units (see Fig. 3) and produce images of patterns on the workpiece. A storage means is provided which stores reference patterns at low magnification (low magnification memory 82) and at high magnification (high magnification memory 84). Pattern matching is performed by a comparator (90) which compares current images of patterns (from frame memory 86) with the stored reference patterns of low and high magnification and outputs a pattern matching signal which is used by a control means (controller 92) for driving the workpiece mounting means (see Fig. 4 and the description thereof in column 4).

Respectfully submitted,

David S. Safran

Registration No. 27,997

NIXON PEABODY LLP 8180 Greensboro Drive, Suite 800 McLean, Virginia 22102 Telephone: (703) 790-9110